



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/563,563

01/06/2006

Shinji Miwa

125868

3753

25944 7590 06/16/2009

OLIFF & BERRIDGE, PLC
P.O. BOX 320850
ALEXANDRIA, VA 22320-4850

EXAMINER

ALAVI, AMIR

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

06/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,563	Applicant(s) MIWA ET AL.	
	Examiner Amir Alavi	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 20-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20081126; 20080618; 20060106</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

- Applicant's election with traverse of claims 1-19 in the reply filed on 02 April 2009 is acknowledged.
- The traversal is on the grounds that claims do not differ significantly. This is not found persuasive because restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply: (a) the inventions have acquired a separate status in the art in view of their different classification; (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter; (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries); (d) the prior art applicable to one invention would not likely be applicable to another invention;
- The requirement is still deemed proper and is therefore made **FINAL**.

Art Unit: 2624

- Claims 20-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Applicant timely traversed the restriction requirement in the reply filed on 02 April 2009.

Priority

- Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

- Applicant is reminded of the proper language and format for an abstract of the disclosure.
- The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
- The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.
- The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

- *35 U.S.C. 101 reads as follows:*
- *Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.*
- Claims 1-10 and 19 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention.
- Supreme Court precedent³ and recent Federal Circuit decisions⁴ indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to a particular machine or apparatus, or (2) transform a particular article to a different state or thing. This is referred to as the “machine or transformation test”, whereby the recitation of a particular machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility (See *Benson*, 409 U.S. at 71-72), and the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity (See *Flook*, 437 U.S. at 590”).

- While the instant claims recite a series of steps or acts to be performed, these claims neither transform an article nor positively tie to a particular machine that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.
- The recited steps, “detecting a correspondence between one color of a first plurality of colors in a first image and one color of a second plurality of colors in a second image” and “correcting said first plurality of colors or said second plurality of colors in accordance with said correspondence” neither transform underlying subject matter nor positively tie to a machine that accomplishes the claimed method step.
- Examiner suggest amending these claims to include, *A method comprising: “**using a processor (or computer) to perform the steps of:**”*

Claim Rejections - 35 USC § 101

- 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (Official Gazette notice of 22 November 2005), Annex IV, reads as follows (see also MPEP 2106):

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

- Claim 17 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.
- Claim 17 defines an image processing program embodying functional descriptive material (i.e., a computer program or computer executable code).
- However, the claim does not define a "computer-readable medium or computer-readable memory" and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). The scope of the presently claimed invention encompasses

Art Unit: 2624

products that are not necessarily computer readable, and thus NOT able to impart any functionality of the recited program.

- The examiner suggests amending the claim to embody the program on “**computer-readable medium**” or equivalent; assuming the specification does NOT define the computer readable medium as a “signal”, “carrier wave”, or “transmission medium” which are deemed non-statutory (refer to “note” below).
- Any amendment to the claim should be commensurate with its corresponding disclosure.

Note:

“A transitory, propagating signal ... is not a “process, machine, manufacture, or composition of matter.” Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter.” (In re Nuijten, 84 USPQ2d 1495 (Fed. Cir. 2007).

Should the full scope of the claim as properly read in light of the disclosure encompass non-statutory subject matter such as a “signal”, the claim as a whole would be non-statutory. Should the applicant’s specification define or exemplify the computer readable medium or memory (or whatever language applicant chooses to recite a computer readable medium equivalent) as statutory tangible products such as a hard drive, ROM, RAM, etc, **as well as** a non-statutory entity such as a “signal”, “carrier wave”, or “transmission medium”, the examiner

Art Unit: 2624

suggests amending the claim to include the disclosed tangible computer readable storage media, while at the same time excluding the intangible transitory media such as signals, carrier waves, etc.

Merely reciting functional descriptive material as residing on a “tangible” or other medium is not sufficient. If the scope of the claimed medium covers media other than “computer readable” media (e.g., “a tangible media”, a “machine-readable media”, etc.), the claim remains non-statutory. The full scope of the claimed media (regardless of what words applicant chooses) should not fall outside that of a computer readable medium.

Claim Rejections - 35 USC § 102

- The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- *Claims 1, 11, 13-15 and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kagawa et al. (USPN 7,177,469 B2), hereinafter, "Kagawa".*

Regarding claim 1, Kagawa recites, a detection step of detecting a correspondence between one color of a first plurality of colors in a first image and one color of a second plurality of colors in a second image and a correction step of correcting said first plurality of colors or said second plurality of colors in accordance with said correspondence (Please note, figure 1, in correlation to column 6, lines 58-67. As indicated The color conversion device according to the present invention is performing color conversion on first image data consisting of a plurality of first color data, and constituting image information for each pixel, into second image data consisting of a plurality of second color data, and constituting image information for each pixel. The color conversion device includes a unit for determining first color correction amounts from the first image data; and a unit for determining characteristics information of the first image data. The color conversion device also includes a unit for determining second color correction amounts from the characteristics information and the first color correction amounts; and a unit for determining the second image data by adding or subtracting the second color correction amounts to or from the first image data. The characteristics information determining unit calculates the characteristics information by calculation using lightness information and chroma information of the first

Art Unit: 2624

image data).

Regarding claim 11, arguments analogous to those presented for claim 1, are applicable.

inputting said first image, and a second input part for inputting said second image.

Regarding claim 13, Kagawa recites, wherein said first input part is one of a scanner and a digital camera, and said second input part is the other of said scanner and said digital camera (Please note, Abstract of the invention).

Regarding claims 14-15, arguments analogous to those presented for claims 8-9, are applicable.

Regarding claim 17-19, arguments analogous to those presented for claim 1, are applicable.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- *Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kagawa et al. (USPN 7,177,469 B2), hereinafter, "Kagawa".*

Regarding claims 12 and 16 Kagawa recites, a detection step of detecting a correspondence between one color of a first plurality of colors in a first image and one color of a second plurality of colors in a second image and a correction step of correcting said first plurality of colors or said second plurality of colors in accordance with said correspondence (Please note, figure 1, in correlation to column 6, lines 58-67. As indicated The color conversion device according to the present invention is performing color conversion on first image data consisting of a plurality of first color data, and constituting image information for each pixel, into second image data consisting of a plurality of second color data, and constituting image information for each pixel. The color conversion device includes a unit for determining first color correction amounts from the first image data; and a unit for determining characteristics

Art Unit: 2624

information of the first image data. The color conversion device also includes a unit for determining second color correction amounts from the characteristics information and the first color correction amounts; and a unit for determining the second image data by adding or subtracting the second color correction amounts to or from the first image data. The characteristics information determining unit calculates the characteristics information by calculation using lightness information and chroma information of the first image data).

Kagawa does not recite expressly, wherein having a first and second input parts and extracting feature colors based on a predetermined range or a range specified by the user.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to design a system having a first and second input parts and extracting feature colors based on a predetermined range or a range specified by the user. Applicant has not disclosed that such design provides an advantage, is used for a particular purpose or solves a stated problem.

One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well wherein having a first and second input parts and extracting feature colors based on a predetermined range or a range specified by the user because a system having two distinct inputs is more efficient and if the color ranges are specified by a user could give the user ultimate result in the design of the system.

Art Unit: 2624

Therefore, it would have been obvious to one of ordinary skill in this art to modify Kagawa's with a system having a first and second input parts and extracting feature colors based on a predetermined range or a range specified by the user to obtain the invention as specified in claims 12 and 16.

Examiner's Note

- The referenced citations made in the rejection(s) above are intended to exemplify areas in the prior art document(s) in which the Examiner believed are the most relevant to the claimed subject matter.
- However, it is incumbent upon the Applicant to analyze the Prior Art document(s) in its/their entirety since other areas of the document(s) may be relied upon at a later time to substantiate Examiner's rationale of record.
- A Prior Art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). However, "the Prior Art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed" In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

Art Unit: 2624

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amir Alavi whose telephone number is 571-272-7386. The examiner can normally be reached on Mon-Friday. 8:30 am thru 5:00pm.
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Art Unit: 2624

- Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amir Alavi/
Primary Examiner, Art Unit 2624
15 June 2009